

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
5 October 2000 (05.10.2000)

PCT

(10) International Publication Number
WO 00/58360 A3

(51) International Patent Classification⁷: **C07K 14/575**,
A61K 38/22, A61P 5/48

(21) International Application Number: PCT/GB00/01089

(22) International Filing Date: 29 March 2000 (29.03.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
9907216.7 29 March 1999 (29.03.1999) GB
9917565.5 27 July 1999 (27.07.1999) GB

(71) Applicant (for all designated States except US): **UNIVERSITY OF ULSTER** [GB/GB]; Coleraine, Co Londonderry BT52 1SA (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **O'HARTE**, Finbarr, Paul, Mary [GB/GB]; 2 Cambourne Park, Finvoy Road, Ballymoney, Co Antrim BT53 7PG (GB). **FLATT**, Peter, Raymond [GB/GB]; 18 Ballymacrea Road, Portrush, Co Antrim BT56 8NR (GB).

(74) Agent: **MURGITROYD & COMPANY**; 373 Scotland Street, Glasgow G5 8QA (GB).

(81) Designated States (national): AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

- With international search report.
- Before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments.

(88) Date of publication of the international search report:
25 January 2001

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ANALOGS OF GASTRIC INHIBITORY PEPTIDE AND THEIR USE FOR TREATMENT OF DIABETES

(57) Abstract: The present invention provides peptides which stimulate the release of insulin. The peptides, based on GIP 1-42 include substitutions and/or modifications which enhance and influence secretion and/or have enhanced resistance to degradation. The invention also provides a process of N terminally modifying GIP and the use of the peptide analogues for treatment of diabetes.

WO/00/58360 A3